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THIS IS A RELATIVELY QUIET BUT CAREFULLY CONSIDERED PROJECT

By Ruth Slavid. Photography by David Jones

The structure of a new mixed-used development in London's fashionable Shoreditch grew rapidly this summer, thanks to the use of a prefabricated solid timber structural system from specialist contractor Eurban. Architect Quay2c has used this system for Fairmule House, a combination of 11 flats and six business units, in its largest application in the UK so far.

Fairmule House derives its name from famous former local resident Thomas Fairchild. A market gardener, his pioneering work was crossing the sweet william and the carnation to create the 'Fairchild mule' hybrid. References to this occur not only in the name but also in some of the external graphics.

The architect inherited an existing planning permission for the site which defined the volume but made less than ideal use of the space – for example, all apartments were single aspect. Quay2c redefined the internal layout and inserted a second staircase to improve circulation.

It chose to use the solid-timber construction process for environmental reasons but also because of the speed of construction, the high tolerances and the good thermal and acoustic properties that it offered. Walls were 115mm thick, with floor and roof panels 170mm thick. Lengths were up to 140mm but, because of the dimensional accuracy, the elements were craned into place quickly and easily.

One innovation was that the lift shaft was also created from timber panels. The architect convinced lift company Kone that it could achieve the required dimensional accuracy with an enclosure of timber panels. Again construction was straightforward.

Wood-fibre insulation plays an entirely separate role in the project, with the Jupiter underfloor heating. The heating pipes are laid into 30mm-deep Gutex wood-fibre insulation, which was pre-cut to receive the heating pipes. Gutex is made from the waste wood-fibres from sustainably sourced timber, largely pine. On this project it provides a sound reduction of around 15dB.

The building will have a green roof and be clad in a mix of materials. On the street facade there will be galvanised steel panels, a reference to watering cans. There is also glazing and signage that picks up on the plants with which Fairchild was involved.

At the back there are western red cedar shingles and recessed balconies overlooking a park. Recessing was necessary to avoid issues of overlooking into an adjacent building. The top storey is being clad with western red cedar boarding, front and back, for visual continuity. With this mix of materials, it is not surprising that the architect selected Velfac windows, which use a mix of wood and aluminium.

Since the building is slotted into a narrow city street, there will be no dramatic overall views. This is a relatively quiet project, but also one that is carefully considered. And the choice of structural system, although it will be largely concealed in the finished building, is part of that consideration.

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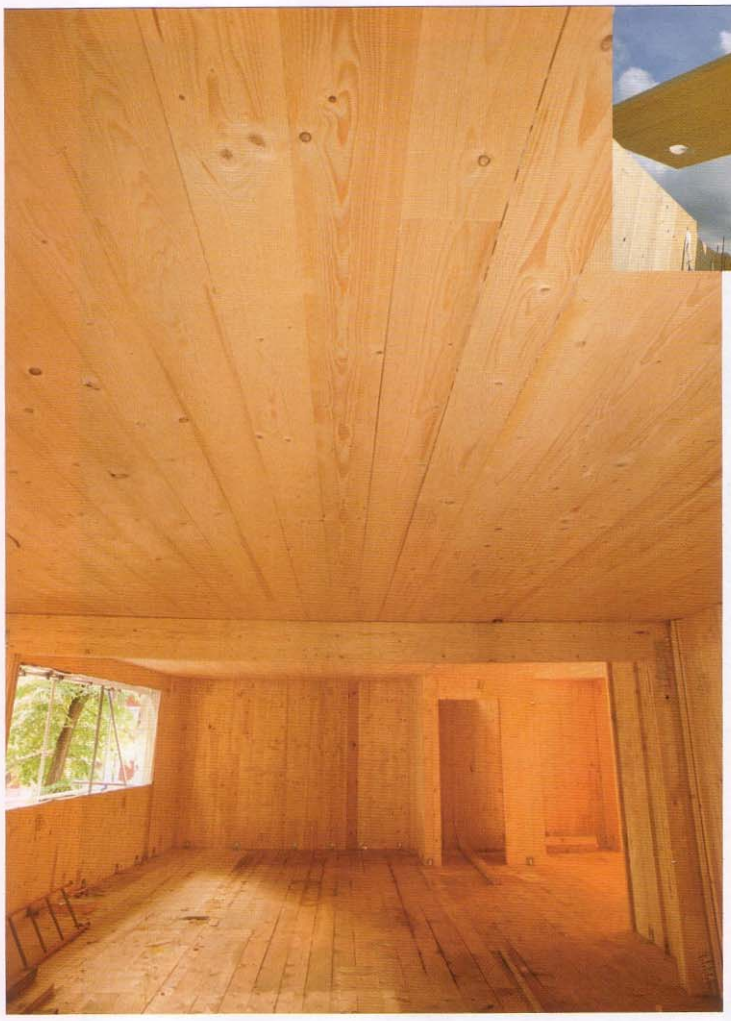

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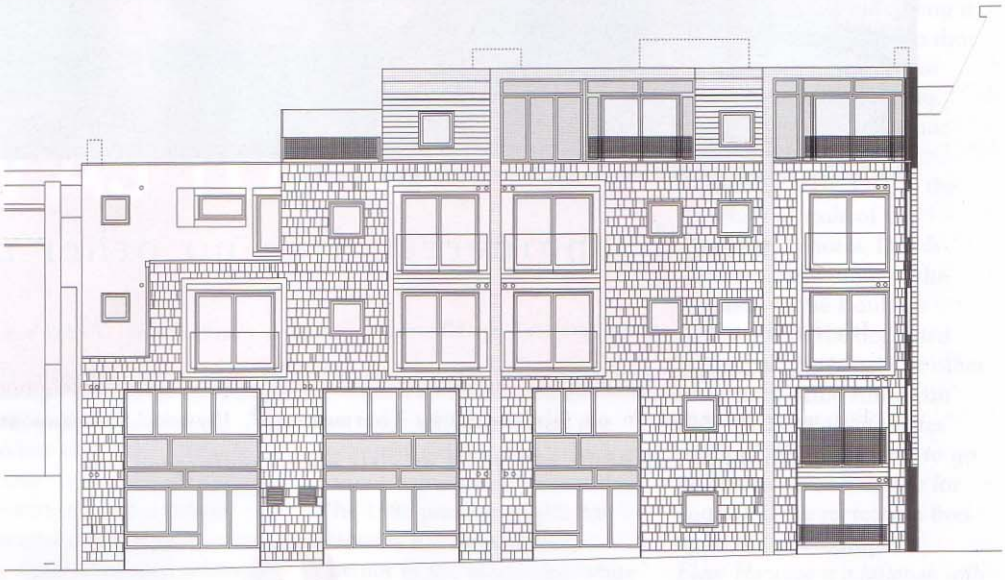
Credits

Client
Aqua Properties
Architect and designer
Quay 2c, www.quay2c.com
Structural engineer
Anders Associates
Mechanical and electrical engineer
Brinson Staniland Partnership, www.bspce.com
Groundworks contractor
Westwood Solid Timber
Structural design and build contractor
Eurban, www.solidtimber.co.uk
Main contractor – fit-out works
LI Construction

1. The building slots into a narrow street with a park behind
2. The choice of timber is integral to the project
3. Timber construction meant that assembly was fast and accurate
4. North elevation



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